ABSTRACT OF THE DISCLOSURE

Pixels in a window, which corresponds to the
position of an input pixel and has a predetermined size,
are extracted from a reduced image obtained by reducing

5   an input image to a predetermined scale. Substitute
data used to substitute the value of the input pixel is
generated based on the extracted pixels in the window.
The difference value between the substitute data and
input pixel value is calculated and is compared with a

10 first threshold value. When the difference value is
smaller than the first threshold value, the input pixel
value is substituted by the substitute data. Thus,
low-frequency noise reduction can be attained using a
minimum required memory size while suppressing adverse

15 effects such as a resolution drop and the like.